

Robert Greene Sterne
Edward J. Kessler
Jorge A. Goldstein
David K.S. Cormwell
Robert W. Esmond
Tracy-Gene G. Durkin
Michele A. Cimbala
Michael B. Ray
Robert E. Sokohl
Eric K. Steffe
Michael Q. Lee
Steven R. Ludwig
John M. Covert
Linda E. Alcorn
Robert C. Millonig
Donald J. Featherstone
Timothy J. Shea, Jr.
Michael V. Messinger
Judith U. Kim

Patrick E. Garrett
Jeffrey T. Helvey
Heidi L. Kraus
Eldora L. Ellison
Thomas C. Fiala
Albert L. Ferro
Donald R. Banowitz
Peter A. Jackman
Jeffrey S. Weaver
Kendrick P. Patterson
Vincent L. Capuano
Brian J. Del Buono
Virgil Lee Beaton
Theodore A. Wood
Elizabeth J. Haanes
Joseph S. Ostroff
Frank R. Cottingham
Rae Lynn P. Guest
George S. Bardmesser

Daniel A. Klein
Jason D. Eisenberg
Michael D. Specht
Andrea J. Kamage
Tracy L. Muller
Jon E. Wright
LuAnne M. DeSantis
Ann E. Summerfield
Aric W. Ledford
Helene C. Carlson
Cynthia M. Bouchez
Timothy A. Doyle
Gaby L. Longworth
Lori A. Gordon
Nicole D. Dretar
Ted J. Ebersole
Laura A. Vogel
Michael J. Mancuso
Bryan S. Wade

Aaron L. Schwartz
Michael G. Penn*
Shannon A. Carroll*
Wesley W. Jones*
Matthew E. Kelley*
Nicole R. Kramer*
Michelle K. Holoubek*
Marsha A. Rose*

Registered Patent Agents*
Karen R. Markowicz
Nancy J. Leith
Matthew J. Dowd
Katrina Yujian Pei Quach
Bryan L. Skelton
Robert A. Schwartzman
Teresa A. Colella
Victoria S. Rutherford

Simon J. Elliott
Julie A. Heider
Mita Mukherjee
Scott M. Woodhouse
Christopher J. Walsh
Liliana Di Nola-Baron
Peter A. Socarras
Jeffrey Mills

Of Counsel
Kenneth C. Bass III
Marvin C. Guthrie

*Admitted only in Maryland
*Admitted only in Virginia
*Practice Limited to Federal Agencies

October 6, 2005

WRITER'S DIRECT NUMBER:
(202) 772-8619

INTERNET ADDRESS:
SCHWARTZ@SKGF.COM

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Mail Stop Amendment

Re: U.S. Utility Patent Application
Application No. 10/644,084; Filed: August 20, 2003
For: **ADIP Protein and Use Thereof**
Inventors: TAKAI *et al.*
Our Ref: 2144.0100000/RWE/ALS

Sir:

Transmitted herewith for appropriate action are the following documents:

1. First Supplemental Information Disclosure Statement Filing Under 37 C.F.R. § 1.97(b);
2. Seven (7) pages of Form PTO/SB/08B citing sixty-four (64) documents;
3. Copies of sixty-four (64) cited documents; and
4. One (1) return postcard.

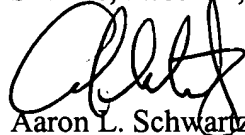
It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

Commissioner for Patents
October 6, 2005
Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

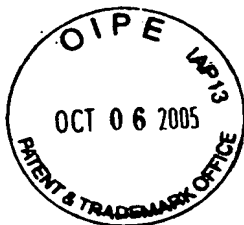
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Aaron L. Schwartz
Attorney for Applicants
Registration No. 48,181

ALS/law
Enclosures

448754_1.DOC



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Takai *et al.*

Appl. No.: 10/644,084

Filed: August 20, 2003

For: **ADIP Protein and Use Thereof**

Confirmation No.: 4948

Art Unit: 1646

Examiner: *To Be Assigned*

Atty. Docket: 2144.0100000/RWE/ALS

**First Supplemental Information Disclosure Statement
Filing Under 37 C.F.R. § 1.97(b)**

Mail Stop Amendment

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO/SB/08B are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98. The numbering on this First Supplemental Information Disclosure Statement is a continuation of the numbering in Applicants' Information Disclosure Statement filed on December 12, 2003, in connection with the captioned application. Copies of documents **AR2-AR23** are submitted herewith.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached Form PTO/SB/08B based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

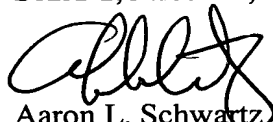
This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. No statement or fee is required.

It is respectfully requested that the Examiner initial and return a copy of the enclosed Form PTO/SB/08B, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

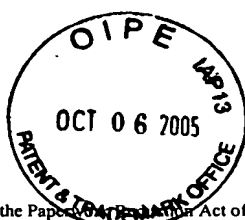


Aaron L. Schwartz
Attorney for Applicants
Registration No. 48,181

Date: October 6, 2005

1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600

441100_1.DOC



PTO/SB/08B (07-05)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Project Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	10/644,084
				Filing Date	August 20, 2003
				First Named Inventor	Yoshimi Takai
				Art Unit	1646
				Examiner Name	To Be Assigned
Sheet	1	of	7	Attorney Docket Number	2144.0100000/RWE/ALS

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published	T ²
	AR2	Aoki, J., <i>et al.</i> , "Mouse Homolog of Poliovirus Receptor-Related Gene 2 Product, mPRR2, Mediates Homophilic Cell Aggregation," <i>Exp. Cell. Res.</i> 235:374-384, Academic Press (1997)	
	AS2	Aoki, J., <i>et al.</i> , "Amino Acid Residues on Human Poliovirus Receptor Involved in Interaction with Poliovirus," <i>J. Biol. Chem.</i> 269:8431-8438, The American Society for Biochemistry and Molecular Biology, Inc. (1994)	
	AT2	Bazzoni, G., <i>et al.</i> , "Interaction of Junctional Adhesion Molecule with the Tight Junction Components ZO-1, Cingulin, and Occludin," <i>J. Biol. Chem.</i> 275:20520-20526, The American Society for Biochemistry and Molecular Biology, Inc. (2000)	
	AR3	Böhl, F., <i>et al.</i> , "She2p, a novel RNA-binding protein tethers <i>ASH1</i> mRNA to the Myo4p myosin via She3p," <i>EMBO J.</i> 19:5514-5524, European Molecular Biology Organization (2000)	
	AS3	Cocchi, F., <i>et al.</i> , "The V domain of herpesvirus Ig-like receptor (HlgR) contains a major functional region in herpes simplex virus-1 entry into cells and interacts physically with the viral glycoprotein D," <i>Proc. Natl. Acad. Sci. USA</i> 95:15700-15705, The National Academy of Sciences (1998)	
	AT3	Cocchi, F., <i>et al.</i> , "Cell-to-Cell Spread of Wild-Type Herpes Simplex Virus Type 1, but Not of Syncytial Strains, Is Mediated by the Immunoglobulin-Like Receptors That Mediate Virion entry, Nectin1 (PRR1/HveC/HlgR) and Nectin2 (PRR2/HveB)," <i>J. Virol.</i> 74:3909-3917, American Society for Microbiology (2000)	
	AR4	Eberlé, F., <i>et al.</i> , "The human <i>PRR2</i> gene, related to the human poliovirus receptor gene (<i>PVR</i>), is the true homolog of the murine <i>MPH</i> gene," <i>Gene</i> 159:267-272, Elsevier Science B.V. (1995)	
	AS4	Ebnet, K., <i>et al.</i> , "Junctional Adhesion Molecule Interacts with the PDZ Domain-containing Proteins AF-6 and ZO-1," <i>J. Biol. Chem.</i> 275:27979-27988, The American Society for Biochemistry and Molecular Biology, Inc. (2000)	
	AT4	Farquhar, M.G. and Palade, G.E., "Junctional Complexes in Various Epithelia," <i>J. Cell. Biol.</i> 17:375-412, The Rockefeller University Press (1963)	
	AR5	Fukuhara, A., <i>et al.</i> , "Involvement of nectin in the localization of junctional adhesion molecule at tight junctions," <i>Oncogene</i> 21:7642-7655, Nature Publishing Group (October 2002)	

441098_1.DOC

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/644,084
				Filing Date	August 20, 2003
				First Named Inventor	Yoshimi Takai
				Art Unit	1646
				Examiner Name	To Be Assigned
Sheet	2	of	7	Attorney Docket Number	2144.0100000/RWE/ALS

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published	T ²
	AS5	Fukuhara, A., <i>et al.</i> , "Role of nectin in organization of tight junctions in epithelial cells," <i>Genes Cells</i> 7:1059-1072, Blackwell Science Limited (October 2002)	
	AT5	Furuse, M., <i>et al.</i> , "A Single Gene Product, Claudin-1 or -2, Reconstitutes Tight Junction Strands and Recruits Occludin in Fibroblasts," <i>J. Cell. Biol.</i> 143:391-401, The Rockefeller University Press (1998)	
	AR6	Furuse, M., <i>et al.</i> , "Claudin-1 and -2: Novel Integral Membrane Proteins Localizing at Tight Junctions with No Sequence Similarity to Occludin," <i>J. Cell Biol.</i> 141:1539-1550, The Rockefeller University Press (1998)	
	AS6	Furuse, M., <i>et al.</i> , "Direct Association of Occludin with ZO-1 and Its Possible Involvement in the Localization of Occludin at Tight Junctions," <i>J. Cell. Biol.</i> 127:1617-1626, The Rockefeller University Press (1994)	
	AT6	Geraghty, R.J., <i>et al.</i> , "Entry of Alphaherpesviruses Mediated by Poliovirus Receptor-Related Protein 1 and Poliovirus Receptor," <i>Science</i> 280:1618-1620, American Association for the Advancement of Science (1998)	
	AR7	Gumbiner, B.M., "Cell Adhesion: The Molecular Basis of Tissue Architecture and Morphogenesis," <i>Cell</i> 84:345-357, Cell Press (1996)	
	AS7	Haskins, J., <i>et al.</i> , "ZO-3, a Novel Member of the MAGUK Protein Family Found at the Tight Junction, Interacts with ZO-1 and Occludin," <i>J. Cell Biol.</i> 141:199-208, The Rockefeller University Press (1998)	
	AT7	Ikeda, W., <i>et al.</i> , "Afadin: A Key Molecule Essential for Structural Organization of Cell-Cell Junctions of Polarized Epithelia during Embryogenesis," <i>J. Cell. Biol.</i> 146:1117-1131, The Rockefeller University Press (1999)	
	AR8	Imamura, Y., <i>et al.</i> , "Functional Domains of α -Catenin Required for the Strong State of Cadherin-based Cell Adhesion," <i>J. Cell Biol.</i> 144:1311-1322, The Rockefeller University Press (1999)	
	AS8	Itoh, M., <i>et al.</i> , "The 220-kD Protein Colocalizing with Cadherins in Non-Epithelial Cells Is Identical to ZO-1, a Tight Junction-associated Protein in epithelial Cells: cDNA Cloning and Immunoelectron Microscopy," <i>J. Cell. Biol.</i> 121:491-502, The Rockefeller University Press (1993)	

441098_1.DOC

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO				Complete if Known	
FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Application Number	10/644,084
				Filing Date	August 20, 2003
				First Named Inventor	Yoshimi Takai
				Art Unit	1646
				Examiner Name	To Be Assigned
Sheet	3	of	7	Attorney Docket Number	2144.0100000/RWE/ALS

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published	T ²
	AT8	Itoh, M., <i>et al.</i> , "Involvement of ZO-1 in Cadherin-based Cell Adhesion through Its Direct Binding to a Catenin and Actin Filaments," <i>J. Cell Biol.</i> 138:181-192, The Rockefeller University Press (1997)	
	AR9	Itoh, M., <i>et al.</i> , "Characterization of ZO-2 as a MAGUK Family Member Associated with Tight as well as Adherens Junctions with a Binding Affinity to Occludin and α Catenin," <i>J. Biol. Chem.</i> 274:5981-5986, The American Society for Biochemistry and Molecular Biology, Inc. (1999)	
	AS9	Itoh, M., <i>et al.</i> , "Direct Binding of Three Tight Junction-associated MAGUKs, ZO-1, ZO-2, and ZO-3, with the COOH Termini of Claudins," <i>J. Cell. Biol.</i> 147:1351-1363, The Rockefeller University Press (1999)	
	AT9	Itoh, M., <i>et al.</i> , "Junctional adhesion molecule (JAM) binds to PAR-3: a possible mechanism for the recruitment of PAR-3 tight junctions," <i>J. Cell Biol.</i> 154:491-497, The Rockefeller University Press (August 2001)	
	AR10	Knudsen, K.A., <i>et al.</i> , "Interaction of α -Actinin with the Cadherin/Catenin Cell-Cell Adhesion Complex via α -Catenin," <i>J. Cell Biol.</i> 130:67-77, The Rockefeller University Press (1995)	
	AS10	Long, R.M., <i>et al.</i> , "She2p is a novel RNA-binding protein that recruits the Myo4p-She3p complex to <i>ASH1</i> mRNA," <i>EMBO J.</i> 19:6592-6601, European Molecular Biology Organization (2000)	
	AT10	Lopez, M., <i>et al.</i> , "The Human Poliovirus Receptor Related 2 Protein Is a New Hematopoietic/Endothelial Homophilic Adhesion Molecule," <i>Blood</i> 92:4602-4611, American Society of Hematology (1998)	
	AR11	Lopez, M., <i>et al.</i> , "Complementary DNA characterization and chromosomal localization of a human gene related to the poliovirus receptor-encoding gene," <i>Gene</i> 155:261-265, Elsevier Science B.V. (1995)	
	AS11	Lopez, M., <i>et al.</i> , "Nectin2 α (PRR2 α or HveB) and Nectin2 δ Are Low-Efficiency Mediators for Entry of Herpes Simplex Virus Mutants Carrying the Leu25Pro Substitution in Glycoprotein D," <i>J. Virol.</i> 74:1267-1274, American Society for Microbiology (2000)	
	AT11	Mandai, K., <i>et al.</i> , "Afadin: A Novel Actin Filament-binding Protein with one PDZ Domain Localized at Cadherin-based Cell-to-Cell Adherens Junction," <i>J. Cell Biol.</i> 139:517-528, The Rockefeller University Press (1997)	

441098_1.DOC

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO				Complete if Known	
				Application Number	10/644,084
FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Filing Date	August 20, 2003
				First Named Inventor	Yoshimi Takai
				Art Unit	1646
				Examiner Name	To Be Assigned
Sheet	4	of	7	Attorney Docket Number	2144.0100000/RWE/ALS

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published	T ²
	AR12	Martin-Padura, I., <i>et al.</i> , "Junctional Adhesion Molecule, a Novel Member of the Immunoglobulin Superfamily That Distributes at Intercellular Junctions and Modulates Monocyte Transmigration," <i>J. Cell Biol.</i> 142:117-127, The Rockefeller University Press (1998)	
	AS12	Miyahara, M., <i>et al.</i> , "Interaction of Nectin with Afadin Is Necessary for Its Clustering at Cell-Cell Contact Sites but Not for Its <i>cis</i> Dimerization or <i>trans</i> Interaction," <i>J. Biol. Chem.</i> 275:613-618, The American Society for Biochemistry and Molecular Biology, Inc. (2000)	
	AT12	Mizoguchi, A., <i>et al.</i> , "Nectin: an adhesion molecule involved in formation of synapses," <i>J. Cell. Biol.</i> 156:555-565, The Rockefeller University Press (February 2002)	
	AR13	Morrison, M.E. and Racaniello, V.R., "Molecular Cloning and Expression of a Murine Homolog of the Human Poliovirus Receptor Gene," <i>J. Virol.</i> 66:2807-2813, American Society for Microbiology (1992)	
	AS13	Nagafuchi, A., "Molecular architecture of adherens junctions," <i>Curr. Opin. Cell Biol.</i> 13:600-603, Elsevier Science Ltd. (December 2001)	
	AT13	Nagafuchi, A., <i>et al.</i> , "The 102 kd Cadherin-Associated Protein: Similarity to Vinculin and Posttranscriptional Regulation of Expression," <i>Cell</i> 65:849-857, Cell Press (1991)	
	AR14	Ozaki-Kuroda, K., <i>et al.</i> , "Nectin Couples Cell-Cell Adhesion and the Actin Scaffold at Heterotypic Testicular Junctions," <i>Curr. Biol.</i> 12:1145-1150, Elsevier Science Ltd. (July 2002)	
	AS14	Ozawa, M., <i>et al.</i> , "The cytoplasmic domain of the cell adhesion molecule uvomorulin associates with three independent proteins structurally related in different species," <i>EMBO J.</i> 8:1711-1717, IRL Press (1989)	
	AT14	Ponting, C.P., "AF-6/cno: neither a kinesin nor a myosin, but a bit of both," <i>Trends Biochem. Sci.</i> 20:265-266, Elsevier Science Ltd. (1995)	
	AR15	Prasad, R., <i>et al.</i> , "Cloning of the ALL-1 Fusion Partner, the AF-6 Gene, Involved in Acute Myeloid Leukemias with the t(6;11) Chromosome Translocation," <i>Cancer Res.</i> 53:5624-5628, The American Association for Cancer Research (1993)	

441098_1.DOC

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO				Complete if Known	
FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Application Number	10/644,084
				Filing Date	August 20, 2003
				First Named Inventor	Yoshimi Takai
				Art Unit	1646
				Examiner Name	To Be Assigned
Sheet	5	of	7	Attorney Docket Number	2144.0100000/RWE/ALS

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published	T ²
	AS15	Provost, E. and Rimm, D.L., "Controversies at the cytoplasmic face of the cadherin-based adhesion complex," <i>Curr. Opin. Cell Biol.</i> 11:567-572, Elsevier Science Ltd. (1999)	
	AT15	Reymond, N., <i>et al.</i> , "Nectin4/PRR4, a New Afadin-associated Member of the Nectin Family That Trans-interacts with Nectin1/PRR1 through V Domain Interaction," <i>J. Biol. Chem.</i> 276:43205-43215, The American Society for Biochemistry and Molecular Biology, Inc. (November 2001)	
	AR16	Rimm, D.L., <i>et al.</i> , " α_1 (E)-Catenin is an actin-binding and -bundling protein mediating the attachment of F-actin to the membrane adhesion complex," <i>Proc. Natl. Acad. Sci. USA</i> 92:8813-8817, The National Academy of Sciences (1995)	
	AS16	Sakisaka, T., <i>et al.</i> , "Requirement of Interaction of Nectin-1 α /HveC with Afadin for Efficient Cell-Cell Spread of Herpes Simplex Virus Type 1," <i>J. Virol.</i> 75:4734-4743, American Society for Microbiology (May 2001)	
	AT16	Satoh-Horikawa, K., <i>et al.</i> , "Nectin-3, a New Member of Immunoglobulin-like Cell Adhesion Molecules That Shows Homophilic and Heterophilic Cell-Cell Adhesion Activities," <i>J. Biol. Chem.</i> 275:10291-10299, The American Society for Biochemistry and Molecular Biology, Inc. (2000)	
	AR17	Stevenson, B.R., <i>et al.</i> , "Identification of ZO-1: A High Molecular Weight Polypeptide Associated with the Tight Junction (Zonula Occludens) in a Variety of Epithelia," <i>J. Cell Biol.</i> 103:755-766, The Rockefeller University Press (1986)	
	AS17	Suzuki, K., <i>et al.</i> , "Mutations of PVRL1, encoding a cell-cell adhesion molecule/herpesvirus receptor, in cleft lip/palate-ectodermal dysplasia," <i>Nature Genet.</i> 25:427-430, Nature America, Inc. (2000)	
	AT17	Tachibana, K., <i>et al.</i> , "Two Cell Adhesion Molecules, Nectin and Cadherin, Interact through Their Cytoplasmic Domain-associated Proteins," <i>J. Cell. Biol.</i> 150:1161-1175, The Rockefeller University Press (2000)	
	AR18	Takahashi, K., <i>et al.</i> , "Nectin/PRR: An Immunoglobulin-like Cell Adhesion Molecule Recruited to Cadherin-based Adherens Junctions through Interaction with Afadin, a PDZ Domain-containing Protein," <i>J. Cell Biol.</i> 145:539-549, The Rockefeller University Press (1999)	
	AS18	Takeichi, M., "Cadherin Cell Adhesion Receptors as a Morphogenetic Regulator," <i>Science</i> 251:1451-1455, American Association for the Advancement of Science (1991)	

441098_1.DOC

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/644,084
				Filing Date	August 20, 2003
				First Named Inventor	Yoshimi Takai
				Art Unit	1646
				Examiner Name	To Be Assigned
Sheet	6	of	7	Attorney Docket Number	2144.0100000/RWE/ALS

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published	T ²
	AT18	Takeichi, M., "Morphogenetic roles of classic cadherins," <i>Curr. Opin. Cell Biol.</i> 7:619-627, Current Biology Ltd. (1995)	
	AR19	Takeichi, M., <i>et al.</i> , "Patterning of cell assemblies regulated by adhesion receptors of the cadherin superfamily," <i>Phil. Trans. R. Soc. Lond. B.</i> 355:885-890, The Royal Society (2000)	
	AS19	Tepass, U., <i>et al.</i> , "Cadherins in Embryonic and Neural Morphogenesis," <i>Nat. Rev. Mol. Cell. Biol.</i> 1:91-100, Nature Publishing Group (2000)	
	AT19	Tsukita, S., <i>et al.</i> , "Molecular linkage between cadherins and actin filaments in cell-cell adherens junctions," <i>Curr. Opin. Cell Biol.</i> 4:834-839, Current Biology Ltd. (1992)	
	AR20	Tsukita, S., <i>et al.</i> , "Occludin and claudins in tight-junction strands: leading or supporting players?," <i>Trends Cell Biol.</i> 9:268-273, Elsevier Science (1999)	
	AS20	Tsukita, S., <i>et al.</i> , "Structural and signaling molecules come together at tight junctions," <i>Curr. Opin. Cell Biol.</i> 11:628-633, Elsevier Science Ltd. (1999)	
	AT20	Vleminckx, K. and Kemler, R., "Cadherins and tissue formation: integrating adhesion and signaling," <i>BioEssays</i> 21:211-220, John Wiley & Sons, Inc. (1999)	
	AR21	Warner, M.S., <i>et al.</i> , "A Cell Surface with Herpesvirus Entry Activity (HvE) Confers Susceptibility to Infection by Mutants of Herpes Simplex Virus Type 1, Herpes Simplex Virus Type 2, and Pseudorabies Virus," <i>Virol.</i> 246:179-189, Academic Press (1998)	
	AS21	Watabe-Uchida, M., <i>et al.</i> , " α -Catenin-Vinculin Interaction Functions to Organize the Apical Junctional Complex in Epithelial Cells," <i>J. Cell Biol.</i> 142:847-857, The Rockefeller University Press (1998)	
	AT21	Weiss, E.E., <i>et al.</i> , "Vinculin Is Part of the Cadherin-Catenin Junctional Complex: Complex Formation between α -Catenin and Vinculin," <i>J. Cell Biol.</i> 141:755-764, The Rockefeller University Press (1998)	

441098_1.DOC

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/644,084
				Filing Date	August 20, 2003
				First Named Inventor	Yoshimi Takai
				Art Unit	1646
				Examiner Name	To Be Assigned
Sheet	7	of	7	Attorney Docket Number	2144.0100000/RWE/ALS

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published	T ²
	AR22	Willott, E., <i>et al.</i> , "The tight junction protein ZO-1 is homologous to the <i>Drosophila</i> discs-large tumor suppressor protein of septate junctions," <i>Proc. Natl. Acad. Sci. USA</i> 90:7834-7838, The National Academy of Sciences (1993)	
	AS22	Wittchen, E.S., <i>et al.</i> , "Exogenous Expression of the Amino-terminal Half of the Tight Junction Protein ZO-3 Perturbs Junctional Complex Assembly," <i>J. Cell Biol.</i> 151:825-836, The Rockefeller University Press (2000)	
	AT22	Yagi, T. and Takeichi, M., "Cadherin superfamily genes: functions, genomic organization, and neurologic diversity," <i>Genes Dev.</i> 14:1169-1180, Cold Spring Harbor Laboratory Press (2000)	
	AR23	Yokoyama, S., <i>et al.</i> , " α -Catenin-independent Recruitment of ZO-1 to Nectin-based Cell-Cell Adhesion Sites through Afadin," <i>Mol. Biol Cell</i> 12:1595-1609, The American Society for Cell Biology (June 2001)	

441098_1.DOC

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.